

## STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for March, 1892, of the directors of the various state weather services:

## ALABAMA.

*Temperature.*—The mean was 2.2 below the normal; maximum, 87, at Daphne, 31st, and at Geneva, 27th; minimum, 11, at Newburgh, 19th; greatest monthly range, 69, at Newburgh; least monthly range, 39, at Double Springs.

*Precipitation.*—The average was 0.16 above the normal; greatest monthly, 11.89, at Montgomery; least monthly, 2.13, at Fayette.

*Wind.*—Prevailing direction, northwest.—*P. H. Mell, Observer, Weather Bureau, Auburn, director.*

## ARIZONA.

*Temperature.*—Maximum, 98, at Fort Mohave, 12th; minimum, 0 (zero), at Flagstaff, 29th; greatest monthly range, 64, at Flagstaff and San Carlos; least monthly range, 30, at Gila Bend.

*Precipitation.*—Greatest monthly, 3.80, at Flagstaff; least monthly, 0.21, at Fort Mohave and Saint Johns.—*J. C. Hayden, Observer, Weather Bureau, Tucson, director.*

## ARKANSAS.

*Temperature.*—The mean was 2.6 below the normal; maximum, 84, at Keesees Ferry, Pine Bluff, and Black Rock, 31st; minimum, 9, at Hot Springs, 18th; greatest monthly range, 74, at Black Rock; least monthly range, 56, at Winslow.

*Precipitation.*—The average was 0.93 below the normal; greatest monthly, 4.60, at Stuttgart; least monthly, 1.58, at Malvern.

*Wind.*—Prevailing direction, northwest.—*M. F. Locke, Commissioner of Agriculture, Little Rock, director; F. H. Clarke, Observer, Weather Bureau, assistant.*

## CALIFORNIA.

*Temperature.*—The mean was 1.4 above the normal; maximum, 93, at Davisville, 9th; minimum, 23, at Fort Jones and Forestville, 31st; greatest monthly range, 66, at Forestville and Saticoy; least monthly range, 21, at Drytown.

*Precipitation.*—The average was 0.44 above the normal; greatest monthly, 8.08, at Upper Mattole; least monthly, 0.25, at Needles.

*Wind.*—Prevailing direction, northwest.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

## COLORADO.

The month has been unusually cold, cloudy, and wet.

*Temperature.*—The mean was 2.0 below the normal; maximum, 79, at Lamar, 31st; minimum, —22, at Breckenridge, 17th; greatest monthly range, 93, at Lamar; least monthly range, 43, at Grand Junction.

*Precipitation.*—The average was 0.80 above the normal; greatest monthly, 6.10, at Breckenridge; least monthly, trace, at Leslie.

*Wind.*—Prevailing direction, west.—*W. S. Miller, Observer, Weather Bureau, Denver, director.*

## FLORIDA.

The month was considerably cooler than usual.

*Temperature.*—Maximum, 89, at Manatee, 6th; minimum, 26, at Saint Andrews and Tallahassee, 19th; greatest monthly range, 58, at Archer; least monthly range, 27, at Key West.

*Precipitation.*—Greatest monthly, 3.76, at Jupiter; least monthly, 0.56, at Merritts Island.

*Wind.*—Prevailing direction, southwest.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

## GEORGIA.

*Temperature.*—The mean was about 4.0 below the normal; maximum, 86, at Darien, 31st; minimum, 11, at Diamond, 19th; greatest monthly range, 65, at Adairsville; least monthly range, 44, at Dublin.

*Precipitation.*—Greatest monthly, 11.56, at Talbotton; least monthly, 0.75, at Quitman.

*Wind.*—Prevailing direction, west.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

## ILLINOIS.

*Temperature.*—The mean was 1.3 below the normal of the last 17 years; maximum, 79, at Cairo and Golconda, 31st; minimum, 4, at Dixon, 10th.

*Precipitation.*—The average was 0.65 below the normal of the last 14 years; greatest monthly, 3.32, at Pana; least monthly, 0.93, at McLeansborough.

*Wind.*—Prevailing direction, northeast.—*John Craig, Observer, Weather Bureau, Springfield, director.*

## INDIANA.

*Temperature.*—The mean was 0.2 above the normal; maximum, 78, at Worthington, 31st; minimum, 5, at Hammond, 10th; greatest monthly range, 66, at Worthington; least monthly range, 47, at Hawpatch.

*Precipitation.*—The average was 0.62 below the normal; greatest monthly, 3.85, at Point Isabel; least monthly, 1.05, at Vevay.

*Wind.*—Prevailing directions, north and northeast.—*Prof. H. A. Huston, La Fayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

## IOWA WEATHER AND CROP SERVICE.

*Temperature.*—Maximum, 84, at Glenwood, 3d; minimum, —6, at Glenwood, 10th; greatest monthly range, 90, at Glenwood; least monthly range, 48, at Delaware and McCausland.

*Precipitation.*—Greatest monthly, 4.58, at Logan; least monthly, 0.57, at Elkader.

*Wind.*—Prevailing direction, northwest.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

## KANSAS.

*Temperature.*—The mean was 4.1 below the normal; maximum, 84, at Kiowa, 31st; minimum, —11, at Lakin, 17th; greatest monthly range, 90, at Lakin; least monthly range, 59, at Lawrence.

*Precipitation.*—The average was 2.55 above the normal; greatest monthly, 5.93, at Wakefield; least monthly, 0.80, at Winona.

*Wind.*—Prevailing direction, northeast.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Observer, Weather Bureau, assistant.*

## KENTUCKY.

The month was generally damp and cloudy, and farm work was retarded.

*Temperature.*—The mean was 5.0 below the normal; maximum, 82, at Caddo, Central City, Earlington, and Grand Rivers, 31st; minimum, 7, at Middlesborough, 19th; greatest monthly range, 73, at Springfield; least monthly range, 40, at South Fork.

*Precipitation.*—The average was about normal; greatest monthly, 5.75, at South Fork; least monthly, 2.43, at Louisa.

*Wind.*—Prevailing direction, northeast.—*Frank Burke, Observer, Weather Bureau, Louisville, director.*

## LOUISIANA.

*Temperature.*—The mean was 5.3 below the normal; maximum, 87, at Liberty Hill, 30th; minimum, 14, at Cameron, 17th; greatest monthly range, 68, at Liberty Hill; least monthly range, 39, at Port Eads.

*Precipitation.*—The average was 0.81 below the normal; greatest monthly, 10.71, at Cheneyville; least monthly, 1.61, at Port Eads.

*Wind.*—Prevailing direction, north.—*George E. Hunt, Local Forecast Official, Weather Bureau, New Orleans, director.*

## MARYLAND.

*Temperature.*—Maximum, 67, at Cumberland (b), 25th; minimum, 0 (zero), at Charlotte Hall, 5th; greatest monthly range, 58, at Charlotte Hall; least monthly range, 31, at Denton.

*Precipitation.*—Greatest monthly, 7.20, at Baltimore; least monthly, 2.50, at Boetcheville.

*Wind.*—Prevailing direction, northwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

## MICHIGAN.

*Temperature.*—The mean was 0.9 below the normal; maximum, 66, at Benton Harbor, 26th; minimum, —14, at Bear Lake, 21st, and at Caldwell, 22d; greatest monthly range, 70, at Bellaire and Bear Lake; least monthly range, 36, at Sand Beach.

*Precipitation.*—The average was 0.94 below the normal; greatest monthly, 3.15, at Marquette; least monthly, 0.30, at Evart and Hayes.

*Wind.*—Prevailing direction, northwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

## MINNESOTA.

*Temperature.*—The mean was slightly above the normal, except in the southeastern part of the state; maximum, 60, at Montevideo, 11th, and at Farmington, 8th; minimum, —29, at Pokegama Falls, 15th; greatest monthly range, 85, at Pokegama Falls; least monthly range, 50, at Sheldon.

*Precipitation.*—The average was slightly above the normal, except in the southeastern part of the state; greatest monthly, 3.12, at Kinbrae; least monthly, 0.50, at Mankato.

*Wind.*—Prevailing direction, northwest.—*J. H. Harmon, Observer, Weather Bureau, Minneapolis, director.*

## MISSISSIPPI.

*Temperature.*—The mean was 4.5 below the normal; maximum, 86, at Vaiden, 31st; minimum, 12, at University, 19th; greatest monthly range, 70, at University; least monthly range, 45, at Ship Island.

**Precipitation.**—The average was 0.08 above the normal; greatest monthly, 10.40, at Natchez; least monthly, 3.76, at Ship Island.

**Wind.**—Prevailing direction, north.—*R. B. Fulton, Observer, Weather Bureau, University, director.*

#### MISSOURI.

**Temperature.**—The mean was 1.8 below the normal; maximum, 87, at Mexico, 31st; minimum, —3, at Adrian, 17th; greatest monthly range, 84, at Adrian; least monthly range, 53, at Harris and Pickering.

**Precipitation.**—The average was 0.65 above the normal; greatest monthly, 5.75, at Chillicothe; least monthly, 0.27, at Shelbyna.

**Wind.**—Prevailing direction, northwest.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; J. H. Smith, Observer, Weather Bureau, assistant.*

#### MONTANA.

**Temperature.**—Maximum, 80, at Great Falls, 3d; minimum, —12, at Martinsdale, 17th; greatest monthly range, 80, at Great Falls; least monthly range, 45, at Fort Missoula.

**Precipitation.**—Greatest monthly, 3.90, at Cokedale; least monthly, 0.06, at Deer Lodge.

**Wind.**—Prevailing direction, southwest.—*E. J. Glass, Observer, Weather Bureau, Helena, director.*

#### NEBRASKA.

**Temperature.**—Maximum, 82, at Ansley, 11th; minimum, —19, at Alliance, 17th; greatest monthly range, 95, at Fort Sidney; least monthly range, 0.58, at Superior and Burwell.

**Precipitation.**—Greatest monthly, 5.06, at Auburn; least monthly, 0.25, at Fort Sidney.

**Wind.**—Prevailing direction, northwest.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.*

#### NEVADA.

**Temperature.**—The mean was normal; maximum, 78, at Wabuska, 13th; minimum, —2, at Sunnyside and Monitor Ranch, 31st.

**Precipitation.**—The average was 0.35 above the normal; greatest monthly, 4.49, at Palmetto; least monthly, 0.75, at Humboldt.

**Wind.**—Prevailing direction, west.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

#### NEW ENGLAND.

**Temperature.**—The mean was 1.3 below the normal; maximum, 61, at Northampton, 31st; minimum, —16, at West Milan, 16th; greatest monthly range, 70, at West Milan; least monthly range, 32, at Block Island.

**Precipitation.**—The average was 0.71 below the normal; greatest monthly, 6.66, at Taunton (c); least monthly, 0.92, at Burlington.

**Wind.**—Prevailing direction, northwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, Mass., director.*

#### NEW JERSEY.

**Temperature.**—The mean was 2.4 below the normal; maximum, 65, at Oceanic, 30th; minimum, 6, at Dover, Tenaflly, and Somerville, 22d; greatest monthly range, 55, at Dover; least monthly range, 36, at Gillette.

**Precipitation.**—The average was 1.16 above the normal; greatest monthly, 7.21, at Egg Harbor City; least monthly, 3.11, at Elizabeth.

**Wind.**—Prevailing direction, northwest.—*E. W. McGann, Observer, Weather Bureau, New Brunswick, director.*

#### NEW MEXICO.

**Temperature.**—The mean was slightly below the normal; maximum, 79, at Socorro, 14th; minimum, —4, at Folsom, 17th; greatest monthly range, 77, at Folsom; least monthly range, 45, at Santa Fé.

**Precipitation.**—The average was slightly above the normal; greatest monthly, 2.95, at Monero; least monthly, 0.15, at Olio.

**Wind.**—Prevailing direction, southwest.—*H. B. Hersey, Observer, Weather Bureau, Santa Fé, director.*

#### NEW YORK.

**Temperature.**—The mean was 3.1 below the normal; maximum, 70, at Waverly, 26th; minimum, —13, at Madison Barracks, 13th; greatest monthly range, 73, at Waverly; least monthly range, 32, at Fort Niagara.

**Precipitation.**—The average was 0.14 below the normal; greatest monthly, 7.36, at Rome; least monthly, 0.30, at Au Sable Forks.

**Wind.**—Prevailing direction, northwest.—*Prof. E. A. Fuytes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

#### NORTH CAROLINA.

**Temperature.**—The mean was 3.1 below the normal; maximum, 81, at Chattanooga, Tenn., 31st; minimum, 8, at Highlands, 18th; greatest monthly range, 61, at Knoxville and Chattanooga, Tenn.; least monthly range, 36, at Southport.

**Precipitation.**—The average was 1.55 below the normal; greatest monthly, 6.90, at Highlands; least monthly, 1.31, at Bakersville.

**Wind.**—Prevailing directions, northwest and northeast.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

#### NORTH DAKOTA.

**Temperature.**—The mean was 3.3 above the normal; maximum, 66, at Medora, 4th, and at Fort Yates, 11th; minimum, —35, at Woodbridge; 15th; greatest monthly range, 90, at Woodbridge; least monthly range, 57, at University.

**Precipitation.**—The average was 0.15 above the normal; greatest monthly, 2.41, at Fort Yates; least monthly, 0.38, at Fort Buford.

**Wind.**—Prevailing direction, southeast.—*W. H. Fallon, Observer, Weather Bureau, Bismarck, director.*

#### OHIO.

**Temperature.**—The mean was normal; maximum, 80, at Portsmouth, 31st; minimum, 6, at Wauseon, 11th, and at Bangorville, 14th; greatest monthly range, 63, at Portsmouth; least monthly range, 46, at Harbor.

**Precipitation.**—The average was 0.07 below the normal; greatest monthly, 5.54, at Wauseon; least monthly, 1.06, at Circleville.

**Wind.**—Prevailing direction, northwest.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Observer, Weather Bureau, secretary and assistant.*

#### OKLAHOMA.

**Temperature.**—Maximum, 90, at Fort Sill, 31st; minimum, —3, at Waynoka, 18th; greatest monthly range, 91, at Waynoka; least monthly range, 55, at Kingfisher.

**Precipitation.**—Greatest monthly, 6.88, at Keokuk Falls; least monthly, 0.37, at Kingfisher.

**Wind.**—Prevailing direction, north.—*Louis Dorman, Observer, Weather Bureau, Oklahoma City, director.*

#### OREGON.

The weather conditions have been extremely favorable to all crops and stock.

**Temperature.**—The mean was 1.0 above the normal; maximum, 82, at Grants Pass, 10th; minimum, 12, at Beulah, 5th; greatest monthly range, 58, at Beulah; least monthly range, 30, at Newport.

**Precipitation.**—The average was 1.92 below the normal; greatest monthly, 8.70, at Langlois; least monthly, 0.25, at Burns.

**Wind.**—Prevailing direction, south.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Observer, Weather Bureau, asst.*

#### PENNSYLVANIA.

**Temperature.**—The mean was 4.0 below the normal; maximum, 66, at Meadville, 26th; minimum, —4, at Wellsborough, 21st; greatest monthly range, 64, at Meadville; least monthly range, 40, at Lancaster and Philadelphia.

**Precipitation.**—The average was 1.00 above the normal; greatest monthly, 7.60, at Girardville; least monthly, 2.04, at Wysox.

**Wind.**—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia; H. L. Ball, Observer, Weather Bureau, assistant.*

#### SOUTH CAROLINA.

**Temperature.**—Maximum, 78, at Port Royal, 31st, and at Winnsborough, 23d; minimum, 23, at Kitchings Mills, 19th.

**Precipitation.**—Greatest monthly, 4.96, at Greenville; least monthly, 3.05, at Port Royal.—*A. P. Butler, Observer, Weather Bureau, Columbia, director.*

#### SOUTH DAKOTA.

**Temperature.**—The mean was 1.5 above the normal; maximum, 77, at Forest City, 30th; minimum, —16, at Cross, 16th; greatest monthly range, 86, at Cross; least monthly range, 67, at Parkston, Wentworth, and Fort Randall.

**Precipitation.**—The average was 0.14 above the normal; greatest monthly, 1.85, at Fort Randall; least monthly, 0.45, at Tyndall.

**Wind.**—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

#### TENNESSEE WEATHER CROP SERVICE.

The month was the coldest March since 1885.

**Temperature.**—The mean was 1.2 below the normal of the last 10 years; maximum, 84, at Hohenwald, 31st, and was the highest temperature recorded for March during the last 10 years; minimum, —4, at Riddleton, 18th, and was the lowest temperature recorded for March in the last 10 years; greatest monthly range, 83, at Riddleton; least monthly range, 48, at Johnson City.

**Precipitation.**—The average was 1.48 below the normal of the last 10 years; greatest monthly, 6.32, at Nunnely; least monthly, 1.54, at Jackson.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

#### TEXAS.

**Temperature.**—Maximum, 96, at Fort Ringgold, 23d; minimum, 5, at Hartley, 17th; greatest monthly range, 77, at Camp Pena Colorado; least monthly range, 53, at Huntsville.

**Precipitation.**—Greatest monthly, 4.46, at Dallas; least monthly, 0.00, at Camp Pena Colorado.

**Wind.**—Prevailing direction, southeast.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

#### UTAH.

**Temperature.**—Maximum, 83, at Saint George, 12th; minimum, 4, at Loa, 31st; greatest monthly range, 66, at Beaver; least monthly range, 26, at Levan.

**Precipitation.**—Greatest monthly, 3.45, at Thistle; least monthly, 0.20, at Scofield.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

## VIRGINIA.

*Temperature.*—Maximum, 79, at Richmond, 4th; minimum, 14, at Fort Myer, 14th; greatest monthly range, 59, at Big Stone Gap and Richmond; least monthly range, 34, at Mossing Ford.

*Precipitation.*—Greatest monthly, 5.80, at Birdsnest; least monthly, 1.54, at Blacksburg.

*Wind.*—Prevailing direction, northwest.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

## WASHINGTON.

*Temperature.*—The mean was 3.1 above the normal; maximum, 81, at Seattle, 11th; minimum, 18, at Waterville, 27th; greatest monthly range, 48, at Chehalis and Seattle; least monthly range, 24, at Tatoosh Island.

*Precipitation.*—The average was 0.50 below the normal; greatest monthly, 11.57, at Neah Bay; least monthly, 0.44, at Colfax.

*Wind.*—Prevailing direction, south.—*E. B. Olney, Observer, Weather Bureau, Olympia, director.*

## WEST VIRGINIA.

*Temperature.*—Maximum, 87, at Huntington, 30th; minimum, 8, at Pleasant Hill, 11th; greatest monthly range, 72, at Huntington; least monthly range, 41, at Martinsburg.

*Precipitation.*—Greatest monthly, 5.30, at Spencer; least monthly, 1.91, at Moorfield.

*Wind.*—Prevailing direction, west.—*W. W. Dent, Observer, Weather Bureau, Parkersburg, director.*

## WISCONSIN.

*Temperature.*—Maximum, 63, at Prairie du Chien, 25th and 27th; minimum, —27, at Hayward, 16th; greatest monthly range, 82, at Hayward; least monthly range, 44, at Madison.

*Precipitation.*—greatest monthly, 2.09, at Menomonie; least monthly, 0.45, at New Holstein.

*Wind.*—Prevailing direction, northwest.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

## WYOMING.

*Temperature.*—Maximum, 83, at Casper, 12th; minimum, —13, at Lusk, 15th; greatest monthly range, 83, at Casper; least monthly range, 41, at Evanston.

*Precipitation.*—Greatest monthly, 3.60, at Casper; least monthly, trace, at La Barge.

*Wind.*—Prevailing direction, northwest.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*

## CONTRIBUTIONS AND ORIGINAL ARTICLES.

## AVERAGE HOURLY PRECIPITATION.

The following tables show for the several seasons and for the year the average hourly amount, frequency, and intensity of precipitation at Washington, D. C., and New York, N. Y., as determined from records of self-registering gauges for 16 years at Washington and for 22 years at New York:

*Average hourly precipitation at Washington, D. C., for the period September, 1874 to 1891, lacking 1879, and 1889 after April. (Eccard gauge.)*

Hour ending at—	Spring.			Summer.			Autumn.			Winter.			Rainy season (winter months omitted).			Annual.		
	Amount.	Frequency.	Intensity.	Amount.	Frequency.	Intensity.	Amount.	Frequency.	Intensity.	Amount.	Frequency.	Intensity.	Amount.	Frequency.	Intensity.	Amount.	Frequency.	Intensity.
1 a. m.	.310	8.3	.037	.323	6.6	.049	.252	6.7	.038	.283	9.1	.031	.885	21.6	.041	1.168	30.7	.038
2 a. m.	.303	8.5	.035	.273	6.2	.044	.312	6.6	.047	.306	9.6	.032	.888	21.3	.042	1.194	30.9	.039
3 a. m.	.350	9.1	.038	.359	6.0	.060	.408	6.7	.067	.343	9.7	.035	1.117	21.8	.051	1.460	31.5	.046
4 a. m.	.345	10.1	.034	.315	5.8	.054	.309	7.1	.043	.373	10.7	.035	.969	23.0	.042	1.342	33.7	.036
5 a. m.	.377	10.0	.038	.333	5.1	.065	.268	7.4	.036	.363	11.3	.032	.978	22.5	.043	1.341	33.8	.039
6 a. m.	.366	10.6	.034	.293	4.8	.061	.297	7.4	.040	.405	11.8	.034	.956	22.8	.042	1.361	34.6	.039
7 a. m.	.373	10.8	.034	.385	5.6	.059	.310	8.0	.039	.435	11.6	.037	1.068	24.4	.043	1.503	36.0	.042
8 a. m.	.332	11.3	.029	.249	5.3	.047	.344	7.8	.044	.425	11.8	.036	.925	24.4	.038	1.350	36.2	.037
9 a. m.	.368	11.2	.033	.279	5.8	.048	.301	8.2	.036	.427	11.6	.037	.948	25.2	.037	1.375	36.8	.037
10 a. m.	.398	11.7	.034	.391	6.4	.061	.350	7.6	.046	.439	12.6	.035	1.139	25.7	.044	1.578	38.3	.041
11 a. m.	.344	11.1	.031	.423	6.0	.070	.323	7.8	.041	.480	12.8	.038	1.090	24.9	.044	1.570	37.7	.041
Noon.	.351	9.5	.037	.427	5.6	.076	.472	7.7	.048	.505	11.5	.044	1.150	22.8	.050	1.655	34.3	.048
1 p. m.	.283	6.0	.047	.440	3.5	.126	.243	5.6	.043	.407	8.0	.051	.966	15.1	.064	1.373	23.1	.059
2 p. m.	.460	7.3	.067	.787	5.5	.143	.292	6.9	.042	.277	8.4	.033	1.539	19.7	.078	1.816	28.1	.064
3 p. m.	.434	7.6	.057	.784	6.9	.113	.381	6.7	.057	.244	8.2	.030	1.599	21.2	.075	1.843	29.4	.062
4 p. m.	.490	5.5	.058	.534	7.4	.113	.468	6.4	.073	.279	8.7	.032	1.792	22.3	.080	2.071	31.0	.067
5 p. m.	.418	9.1	.046	.623	7.3	.085	.382	6.8	.056	.214	8.8	.024	1.423	23.2	.061	1.637	32.0	.051
6 p. m.	.304	8.7	.035	.701	8.1	.086	.310	6.8	.045	.298	8.1	.037	1.315	23.6	.056	1.613	31.7	.051
7 p. m.	.402	9.4	.043	.847	8.3	.102	.374	6.3	.059	.284	8.8	.032	1.623	24.0	.067	1.907	32.8	.058
8 p. m.	.412	9.2	.045	.694	7.9	.088	.363	6.5	.050	.364	8.8	.041	1.469	23.6	.062	1.533	32.4	.056
9 p. m.	.347	5.7	.040	.963	8.0	.120	.383	6.6	.058	.334	8.8	.038	1.693	23.3	.072	2.027	32.1	.063
10 p. m.	.404	9.2	.044	.587	7.8	.075	.352	7.1	.050	.345	8.9	.039	1.343	24.1	.055	1.688	33.0	.051
11 p. m.	.369	9.2	.040	.484	7.6	.064	.247	7.2	.034	.257	8.0	.029	1.100	24.0	.046	1.357	32.8	.041
12 p. m.	.322	9.1	.035	.347	6.2	.056	.258	7.0	.037	.290	9.3	.031	.927	22.3	.042	1.217	31.6	.038
Means.	.369	9.3	.040	.506	6.4	.078	.329	7.0	.047	.349	9.9	.035	1.200	22.8	.053	1.553	32.7	.048

The average for substantially the same period by regular gauge measurements is 46.86.

*Dr. Daniel Draper's record of average hourly precipitation at Central Park, New York, N. Y., for the period 1870–1891, inclusive.*

1 a. m.	.400	9.1	.044	.456	6.3	.072	.497	8.0	.062	.341	9.9	.034	1.353	23.4	.058	1.694	33.8	.051
2 a. m.	.418	9.5	.044	.533	6.7	.079	.410	8.5	.048	.370	10.7	.035	1.361	24.7	.055	1.737	35.4	.049
3 a. m.	.397	9.5	.042	.544	7.1	.076	.462	9.1	.051	.444	10.4	.042	1.403	25.7	.054	1.847	36.1	.051
4 a. m.	.398	10.1	.039	.549	7.1	.077	.478	9.2	.052	.411	10.7	.038	1.425	26.4	.054	1.836	37.1	.049
5 a. m.	.397	10.0	.040	.487	7.7	.063	.528	9.6	.055	.428	11.2	.038	1.412	27.3	.052	1.840	38.5	.048
6 a. m.	.393	10.0	.039	.425	7.3	.058	.376	9.3	.040	.423	11.6	.036	1.194	26.6	.045	1.617	38.2	.042
7 a. m.	.348	9.5	.036	.492	6.6	.074	.409	8.9	.046	.353	11.2	.032	1.249	25.0	.050	1.602	36.2	.044
8 a. m.	.404	9.5	.042	.600	6.1	.065	.542	8.1	.067	.358	11.3	.032	1.546	23.7	.065	1.904	35.0	.054
9 a. m.	.404	9.7	.041	.450	5.2	.088	.343	7.5	.046	.377	11.0	.034	1.207	22.4	.054	1.584	33.4	.047
10 a. m.	.421	9.8	.043	.341	5.1	.067	.394	7.8	.050	.494	11.0	.045	1.156	22.7	.051	1.650	33.7	.049
11 a. m.	.457	9.8	.046	.350	5.4	.065	.409	7.7	.053	.561	11.2	.050	1.219	22.9	.053	1.780	34.1	.052
Noon.	.401	9.7	.041	.357	4.6	.074	.369	8.1	.045	.508	11.2	.053	1.127	22.6	.050	1.725	33.8	.051
1 p. m.	.351	9.2	.038	.493	6.0	.083	.370	8.2	.045	.559	10.7	.052	1.214	23.4	.052	1.773	34.1	.052
2 p. m.	.430	9.6	.045	.505	6.3	.080	.395	8.3	.045	.522	11.3	.046	1.333	24.2	.055	1.855	35.5	.052
3 p. m.	.397	10.2	.039	.585	6.7	.087	.570	8.3	.068	.571	11.3	.050	1.552	25.2	.062	2.123	36.5	.058
4 p. m.	.462	10.1	.040	.554	7.0	.079	.546	8.3	.066	.512	11.0	.046	1.502	25.4	.059	2.014	36.4	.055
5 p. m.	.476	10.3	.046	.749	7.6	.098	.436	8.3	.052	.445	10.8	.041	1.661	26.2	.063	2.106	37.0	.057
6 p. m.	.418	10.0	.042	.775	8.0	.097	.349	8.1	.043	.337	10.6	.032	1.543	26.1	.059	1.880	36.7	.051
7 p. m.	.397	9.9	.040	.836	8.2	.102	.495	8.6	.054	.341	10.2	.033	1.698	26.7	.064	2.039	36.9	.055
8 p. m.	.426	10.1	.042	.614	7.6	.081	.495	8.9	.050	.364	10.6	.034	1.535	26.6	.058	1.909	37.2	.051
9 p. m.	.424	10.6	.040	.603	7.7	.078	.604	8.5	.071	.369	10.1	.036	1.631	26.8	.061	2.000	36.9	.055
10 p. m.	.369	10.6	.035	.535	7.3	.073	.506	8.6	.059	.336	10.2	.033	1.413	26.5	.053	1.749	36.7	.048
11 p. m.	.437	10.3	.042	.491	7.3	.067	.377	8.2	.045	.350	10.0	.035	1.295	25.8	.050	1.645	35.8	.046
12 p. m.	.520	10.1	.051	.351	6.6	.058	.479	8.3	.058	.370	9.7	.038	1.386	25.0	.055	1.750	34.7	.050
Means.	.412	9.9	.042	.530	6.7	.078	.450	8.4	.053	.426	10.7	.039	1.392	25.0	.056	1.819	35.8	.051